Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (original) A method of printing an image of a three-dimensional object, the method comprising:

printing multiple dots of a colored ink to form an image of the object; and

printing dots of a transparent ink having a refractive index greater than 1 within the image, wherein the dots of transparent ink local alter the path length of light that is emitted from the image to create phase variations on the image.

2. (original) The method of claim 1, further comprising printing a real part of multiple complexel adjacent an imaginary part of the complexel on a recording medium.

3. (currently amended) The method of claim ~~any of the preceding claims~~ 1, further comprising printing a phase plate above the imaginary part of the complexel.

4. (currently amended) The method of ~~preceding~~ claim 1, further comprising printing dots of the transparent ink above dots of the colored ink on a recording medium.

5. (currently amended) The method of ~~any of the preceding claims~~ claim 1, wherein the image is defined by a complex wavefront defined by $A(\mathbf{r})e^{i\theta(\mathrm{r})} = A(\mathbf{r})\cos\theta(\mathbf{r}) + iA(\mathbf{r})\sin\theta(\mathbf{r})$, wherein $A(\mathbf{r})$ represents a two-dimensional distribution of the wavefront amplitude and $\theta(\mathbf{r})$ represents the two-dimensional distribution of the wavefront phase, and further comprising

printing dots of the colored inks to represent a real part of a complexel;

printing dots of a transparent ink over the real part of the complexel to create a $\lambda/2$ phase plate when $\cos\theta(\mathbf{r})$ is negative;

printing dots of the colored inks to represent an imaginary part of the complexel;

printing dots of a transparent ink over the imaginary part of the complexel to create a $\lambda/4$ phase plate when $\sin\theta(\mathbf{r})$ is posative; and

printing dots of a transparent ink over the imaginary part of the complexel to create a $3\lambda/4$ phase plate when $\sin\theta(\mathrm{r})$ is negative.

6. (original) The method of claim 5, further comprising selecting a refractive index of the transparent ink to be printed to print the $\lambda/4$ phase plate, the $\lambda/2$ phase plate, and the $3\lambda/4$ phase plate.

7. (currently amended) The method of claim 5 ~~or 6~~, further comprising selecting a thickness of a layer of the transparent ink to be printed to print $\lambda/4$ phase plate, the $\lambda/2$ phase plate, and the $3\lambda/4$ phase plate.

8. (currently amended) The method of claim ~~any of the preceding claims~~ 1, wherein printing dots of the colored ink and printing dots of the transparent ink further comprises mixing transparent ink having a refractive index with colored ink and printing dots of the mixed ink.

9. (currently amended) The method of ~~any of the preceding claims~~ claim 1, further comprising:

printing multiple dots of at least three colored inks to form an image of the object; and

printing dots of a transparent ink having a refractive index greater than 1 within the multi-color image, wherein the dots of transparent ink local alter the path length of light that shines through the image to create phase variations on the multi-color image.

10. (currently amended) The method of ~~any of the preceding claims~~ claim 1, wherein the image is printed on a transparent medium, such that the image can be illuminated from a back side of the medium and viewed form a front side of the medium.

11. (currently amended) The method of ~~any of claims 1-9~~ claim 1, wherein the image is printed on a reflective medium, such that the image can be illuminated from a front side of the medium and viewed form the front side of the medium.

12. (currently amended) The method ~~claims 10 or 11~~ of claim 1, further comprising printing a layer of transparent ink that introduces a variation in the optical path length of the light emitted from the image, wherein the optical path length variation compensates for a path length differences in illumination light that deviate from plane wave wavefronts.

13. (currently amended) The method of ~~any of the preceding claims~~ claim 1, further comprising

printing multiple images on a recording medium, each image including multiple dots of a colored ink to form an image of the object, and dots of a transparent ink having a refractive index greater than 1 within the image, wherein the dots of transparent ink local alter the path length of light that shines through the image to create phase variations on the image, wherein the multiple images are printed on the film, such that they can be consecutively to create an moving image.

14. (original) A method of printing an optical element on a two-dimensional surface, the method comprising:

printing a layer of transparent ink having a refractive index greater than 1 in a pattern on the surface; and

controlling the local optical path length of light that travels though the transparent ink, such that the phase of light reflected by or transmitted through the ink on the surface is altered in a predetermined manner.

15. (original) The method of claim 14, further comprising controlling the local thickness of the transparent ink to control the local optical path length of light.

16. (original) The method of claim 15, further comprising controlling the local index of refraction of the transparent ink to control the local optical path length of light.

17. (currently amended) The method of ~~any of claims 14-16~~ claim 14, wherein the optical element is a lens.

18. (currently amended) The method of ~~any of claims 14-16~~ claim 14, wherein the optical element is selected from the group consisting, a concave lens, a convex lens, a prism, a phase plate, a grating, a curved mirror, a non-spherical lens, and a zone plate.